Improved: The Power of 96Gbps in 1RU box!

The TigerSwitch 10/100/1000 was the first in the market to bring you a 48-port gigabit switch in a small 1RU footprint. Now enhanced with the latest technologies, the SMC8648T’s 48 auto-MDIX 10/100/1000 ports provide a feature-rich platform for bandwidth-starved networks. The SMC8648T delivers wire-speed switching performance in a robust 88Gbps switch fabric, with advanced features such as QoS priority queuing with IP precedence in Layer2/Layer 4, VLANs with .1Q, 1s, and private, and of course, IGMP for today’s multimedia applications. Also included are features such as RADIUS client enhancement for 802.1x, TACACS+, SSH, SSL, Access Control List (ACL) to address today’s concerns regarding security.

Features
- High-Port density in a 1RU footprint
- Full wire-speed non-blocking switching performance at backplane
- Layer2/3/4 Class of Service through eight priority queuing
- VLANs with GVRP support
- IGMPv1/v2
- LACP for link aggregation
- Port Mirroring Port and system security
- RADIUS remote authentication
- Rate Limiting (ingress & egress)
- Forwarding rate of 35.7Mpps
- Jumbo frames 9K support

Benefits
- Support up to 48 auto-MDIX 10/100/1000 ports with 4 associated mini-GBIC slots for optional gigabit fiber plug-in
- Non-blocking 88Gbps switch fabric for maximum switching performance
- Layer 2/3/4 CoS through eight levels of priority queuing and weighted fair queuing
- Layer2/Layer 4 IP precedence and IP DSCP to ensure smooth transmission of vital data
- Layer 2 isolation between ports within the same private VLAN plus support for automatic GVRP LAN registration for maximum security and bandwidth efficiency
- IGMP allows multicast traffic transmission to registered users only
- Port trunking group links between switches, increases bandwidth for dedicated link
- Port mirroring allows sniffer-tracking data transmission for easy troubleshooting
- Features such as 802.1x, TACACS+ authentication client, SSH for secure Telnet, HTTPS and SSL address today’s concerns regarding security
- Effective management of bandwidth

Compatibility
- IEEE802.3
- IEEE802.3u
- IEEE802.3z
- IEEE802.1d
- IEEE802.1s*
- IEEE802.1P
- IEEE802.1Q
- IEEE802.1v*
- IEEE802.1ad
- IEEE802.1w
- IEEE802.1x
# TigerSwitch™ 10/100/1000

48-port 10/100/1000 Managed Switch with 4 associated mini-GBIC ports

## Specifications

### SMC8648T

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMC8648T</td>
<td>48 Port Gigabit 10/100/1000 Managed Switch with 4 associated mini-GBICs uplink ports</td>
</tr>
<tr>
<td>SMCBGSLCX1</td>
<td>SMCBSLCX1 1000BASE-SX LC SFP mini-GBIC transceiver</td>
</tr>
<tr>
<td>SMCBGLLCX1</td>
<td>SMCBLLCX1 1000BASE-LX LC SFP mini-GBIC transceiver</td>
</tr>
<tr>
<td>SMCBGZLCX1</td>
<td>SMCBZLCX1 1000BASE-ZX LC SFP mini-GBIC transceiver</td>
</tr>
</tbody>
</table>

* please contact your SMC sales for availability

### Specifications

**Ports**
- 48 10/100/1000BASE-T ports
- 4 associated mini-GBIC slots for media expansion

**Network Interface**
- 10BASE-T: RJ-45 UTP Cat. 3, 4, 5, 6, 7, 8
- 100BASE-TX: RJ-45 UTP Cat. 5
- 1000BASE-T: RJ-45 UTP Cat. 5

**Buffer Architecture**
- 2Mb per system

**Aggregated Bandwidth**
- 960gbs

**Switching Database**
- 16K MAC address entries

**Network Interface**
- 10BASE-T: RJ-45 UTP Cat. 3, 4, 5
- 100BASE-TX: RJ-45 UTP Cat. 5
- 1000BASE-T: RJ-45 UTP Cat. 5

**Quality of Service**
- Supports eight levels of priority and weighted fair queuing
- DSCP based Class of Service
- TCP/UDP Port Based Class of Service
- Broadcast storm control
- Link Aggregation
- Port Mirroring
- RADIUS Client Enhancement for 802.1x
- TACACS+ authentication client
- HTTPS and SSL
- SSH for secure Telnet Session
- Rate Limiting
- Static Port Security
- SNTP (Simple Network Time Protocol)
- IEEE802.1s independent Spanning Tree for VLAN groups*

**Management Features**
- In-band Management
- TeNet, SLIP, Web-based HTTP, or SNMP manager
- Out-of-band Management
- RS-232 DB-9 console port
- Software Loading
- TFTP in-band or xmodem out-of-band
- MIB Support
- MIB II (RFC1213), Bridging MIB (RFC4943), Ethernet-Like MIB (RFC1643), RMON MIB (RFC1757), RADIUS authentication client MIB (RFC2618), SMC’s private MIB, Port Entity Access MIB (802.1x), UDP MIB
- RMON Support
- Groups 1, 2, 3, 9 (Statistics, History, Alarm, Event)

**Standards**
- IEEE802.3 Ethernet, IEEE802.3u Fast Ethernet, IEEE802.3z Gigabit
- IEEE802.1D Spanning Tree Protocol and traffic priorities
- IEEE802.1q priority tags
- IEEE802.1Q VLAN
- IEEE802.1Q VLAN tagging
- IEEE802.1ad Link aggregation control protocol
- IEEE802.1w Fast Spanning Tree
- IEEE802.1s Multiple Spanning Tree*
- IEEE802.1w Protocol based VLANs*
- IEEE802.1x authentication

**ISO**
- IEC8802.3
- SNMP (RFC 1157), RMON (RFC 1757), ARP (RFC826), EIGMP (RFC1157), IGMP (RFC1112), MIB II (RFC1213), Ethernet-like MIB (RFC1643), Bridge MIB (RFC1493), RADIUS (RFC2618), MAU MIB

**Compliances**
- CE Mark
- Emissions
  - FCC Class A
  - Industrial Canada Class A
  - EN55022 (CISPR 22) Class A
  - VCCI A
  - C-Tick – AS/NZS 3548 (1995) Class A
  - IEC 1000-4 - 2/3/4/6
  - Safety
    - CISA/NTL (CSA22.2:2950 & UL1950), EN6950 (EIA/G5)

**Optional Plug-in Transceiver**
- Model
  - SMCBSLCX1
  - SMCBLLCX1
  - SMCBZLCX1

**Power Supply**
- Internal, auto-ranging transformer : 90 to 260 VAC, 47 to 63 Hz
- Redundant DC input

**Power Consumption**
- 70W max

**Heat Dissipation**
- 239BTU/hr

**Maximum Current**
- 1.2A @ 110VAC, 0.6A @ 240 VAC

**MTBF**
- 7 years (estimated)

**Switch Features**
- Spanning Tree Protocol
- Forwarding mode with support to IEEE802.1w

**Size**
- 17.37” x 13.9” x 1.7” inch (44.0 x 25.4 x 4.3mm)

**Weight**
- 9.46 lbs (4.3Kg)

**Temperature**
- Operating: 32 – 122°F
- Storage: -40 – 158°F

**Humidity**
- Operating 5% to 95% (non-condensing)

**AC Input**
- 100 to 240V, 50-60Hz

**Power Supply**
- Internal, auto-ranging transformer : 90 TO 260 VAC, 47 to 63 Hz
- Redundant DC input

**Power Consumption**
- 70W max

**Heat Dissipation**
- 239BTU/hr

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**Optional Plug-in Transceiver**
- Model
  - SMCBSLCX1
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**Ports**
- 1000BASE-SX
- 1000BASE-LX
- 1000BASE-ZX

**Network Interface**
- LC connector, 50/125 or 62.5/125 micron multimode fiber cable
- LC connector, 9/125 micron singlemode fiber cable

**Standards**
- 802.3z Gigabit Ethernet
- 802.1x authentication

**Transmission**
- Full duplex

**Network Interface**
- LC connector, 50/125 or 62.5/125 micron multimode fiber cable
- LC connector, 9/125 micron singlemode fiber cable

**Standards**
- 802.3z Gigabit Ethernet

**Transmission**
- Full duplex

**Optional Budget**
- 9DB

**Range**
- 9DB

**Warranty**
- Limited Lifetime